

ESULT 2

ABU31048

ID ABU31048 standard; protein; 285 AA.

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AC ABU31048;

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DT 15-JUN-2007 (revised)

DT 19-JUN-2003 (first entry)

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DE Protein encoded by Prokaryotic essential gene #16575.

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KW Antisense; prokaryotic essential gene; cell proliferation; drug design;

KW BOND_PC; siderophore-mediated iron transport protein (tonB); GO5381;

KW GO6810; GO6826; GO8565; GO15031; GO16020; GO16021; GO30288;
GO42597.

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OS Helicobacter pylori.

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PN WO200277183-A2.

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PD 03-OCT-2002.

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PF 21-MAR-2002; 2002WO-US009107.

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PR 21-MAR-2001; 2001US-00815242.

PR 06-SEP-2001; 2001US-00948993.

PR 25-OCT-2001; 2001US-0342923P.

PR 08-FEB-2002; 2002US-00072851.

PR 06-MAR-2002; 2002US-0362699P.

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PA (ELIT-) ELITRA PHARM INC.

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PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW;

PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;

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DR WPI; 2003-029926/02.

DR N-PSDB; ACA34918.

DR PC:NCBI; gi3915142.

DR PC:SWISSPROT; O25899.

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PT New antisense nucleic acids, useful for identifying proteins or screening

PT for homologous nucleic acids required for cellular proliferation to

PT isolate candidate molecules for rational drug discovery programs.

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PS Claim 25; SEQ ID NO 58972; 1766pp; English.

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CC The invention relates to an isolated nucleic acid comprising any one of
CC the 6213 antisense sequences given in the specification where expression
CC of the nucleic acid inhibits proliferation of a cell. Also included are:
CC (1) a vector comprising a promoter operably linked to the nucleic acid
CC encoding a polypeptide whose expression is inhibited by the antisense
CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC polypeptide or its fragment whose expression is inhibited by the
CC antisense nucleic acid; (4) an antibody capable of specifically binding
CC the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
CC proliferation or the activity of a gene in an operon required for
CC proliferation; (7) identifying a compound that influences the activity of
CC the gene product or that has an activity against a biological pathway
CC required for proliferation, or that inhibits cellular proliferation; (8)
CC identifying a gene required for cellular proliferation or the biological
CC pathway in which a proliferation-required gene or its gene product lies
CC or a gene on which the test compound that inhibits proliferation of an
CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC compound's activity; (11) a culture comprising strains in which the gene
CC product is overexpressed or underexpressed; (12) determining the extent
CC to which each of the strains is present in a culture or collection of
CC strains; or (13) identifying the target of a compound that inhibits the
CC proliferation of an organism. The antisense nucleic acids are useful for
CC identifying proteins or screening for homologous nucleic acids required
CC for cellular proliferation to isolate candidate molecules for rational
CC drug discovery programs, or for screening homologous nucleic acids
CC required for proliferation in cells other than *S. aureus*, *S. typhimurium*,
CC *K. pneumoniae* or *P. aeruginosa*. The present sequence is encoded by one of
CC the target prokaryotic essential genes. Note: The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
CC

CC Revised record issued on 15-JUN-2007 : Enhanced with precomputed
CC information from BOND.

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SQ Sequence 285 AA;

Query Match 100.0%; Score 1453; DB 6; Length 285;
Best Local Similarity 100.0%; Pred. No. 1.1e-100;
Matches 285; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1
MKISPSPRKLSKVSTSVSFLISFALYAIGFGYFLLREDAPEPLAQAGTTKVTMSLAS
INT 60

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Db 1
MKISPSRKLSKVSTSVSFLISFALYAIGFGYFLLREDAPEPLAQAGTTKVTMSLAS
INT 60

Qy 61
NSNTKTNAESAKPKEEPKEKPKKEEPKKEEPKKEVTKPKPKPKPKPKPKPKPKPE
PKPEP 120

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Db 61
NSNTKTNAESAKPKEEPKEKPKKEEPKKEEPKKEVTKPKPKPKPKPKPKPKPKPE
PKPEP 120

Qy 121
KPEPKPEPKVEEVKKEEPKEEPKKEEAKKEEAKESAPKQVTTKDIVKEKDKQEE
NKTSE 180

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Db 121
KPEPKPEPKVEEVKKEEPKEEPKKEEAKKEEAKESAPKQVTTKDIVKEKDKQEE
NKTSE 180

Qy 181
GATSEAQAYNPGVSNEFLMKIQTAISSKNRYPKMAQIRGIEGEVLVSFTINADGS
VTDIK 240

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Db 181
GATSEAQAYNPGVSNEFLMKIQTAISSKNRYPKMAQIRGIEGEVLVSFTINADGS
VTDIK 240

Qy 241 VVKSNTTDILNHAALAIKSAAHLFPKPEETVHLKIPIAYSLKED 285

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Db 241 VVKSNTTDILNHAALAIKSAAHLFPKPEETVHLKIPIAYSLKED 285